

What is Claimed:

1 1. A method of preventing a flooding attack on a network  
2 server in which a large number of requests are received for  
3 connection to a port number on the server, comprising:

4 determining, in response to a request from a host for a  
5 connection to a port number on the server, if the number of  
6 connections to the port assigned to the host exceeds a  
7 prescribed threshold, and, if so,

8 denying the request for a connection.

9 2. The method of claim 1 in which denying the request  
10 further comprises:

11 overriding the denial and allowing the request if a  
12 quality of service parameter pertaining to the requesting  
13 host permits the override.

14 3. The method of claim 2 wherein a connection request is  
15 denied in any event if the number of available connections  
16 to the port are less than a constrained threshold.

17 4. The method of claim 1 or claim 2 or claim 3 further  
18 comprising:

3 calculating the prescribed threshold by multiplying a  
4 percentage P by the number of available connections  
5 remaining for the port.

1 5. Apparatus for preventing a flooding attack on a network  
2 server in which a large number of requests are received for  
3 connection to a port number on the server, comprising:

4 means for determining, in response to a request from a  
5 host for a connection to a port number on the server, if the  
6 number of connections to the port assigned to the host  
7 exceeds a prescribed threshold, and  
8

9 means responsive to the determining means for denying  
10 the request for a connection.

11 6. The apparatus of claim 5 in which means for denying  
12 further comprises:

13 means responsive to a quality of service parameter  
14 pertaining to the requesting host for overriding a request  
15 denial and allowing the request.

1 7. The apparatus of claim 6 further comprising:

2 means for denying a connection request in any event if  
3 the number of available connections to the port are less

4 than a constrained threshold.

1 8. The apparatus of claim 5 or claim 6 or claim 7 further  
2 comprising:

3 means for calculating the prescribed threshold by  
4 multiplying a percentage P by the number of available  
5 connections remaining for the port.

1 9. A storage media containing program code segments for  
2 preventing a flooding attack on a network server in which a  
3 large number of requests are received for connection to a  
4 port number on the server, comprising:

5 a first code segment activated in response to a request  
6 from a host for a connection to a port number on the server  
7 for determining if the number of connections to the port  
8 assigned to the host exceeds a prescribed threshold, and

9 a second code segment responsive to the first code  
10 segment for denying the request for a connection.

1 10. The media of claim 9 in which the second code segment  
2 further comprises:

3 a third code segment for overriding the denial and  
4 allowing the request if a quality of service parameter

5       pertaining to the requesting host permits the override.

1       11. The media of claim 10 further comprising a fourth code  
2       segment for denying a connection request in any event if the  
3       number of available connections to the port are less than a  
4       constrained threshold.

1       12 . The media of claim 9 or claim 10 or claim 11 further  
2       comprising:

3               a fifth code segment for calculating the prescribed  
4       threshold by multiplying a percentage P by the number of  
5       available connections remaining for the port.

1       13. A carrier wave containing program code segments for  
2       preventing a flooding attack on a network server in which a  
3       large number of requests are received for connection to a  
4       port number on the server, comprising:

5               a first code segment activated in response to a request  
6       from a host for a connection to a port number on the server  
7       for determining if the number of connections to the port  
8       assigned to the host exceeds a prescribed threshold, and

9               a second code segment responsive to the first code  
10       segment for denying the request for a connection.

1 14. The carrier wave of claim 13 in which the second code  
2 segment further comprises:

3 a third code segment for overriding the denial and  
4 allowing the request if a quality of service parameter  
5 pertaining to the requesting host permits the override.

1 15. The carrier wave of claim 14 further comprising a  
2 fourth code segment for denying a connection request in any  
3 event if the number of available connections to the port are  
4 less than a constrained threshold.

1 16. The carrier wave of claim 13 or claim 14 or claim 15  
2 further comprising:

3 a fifth code segment for calculating the prescribed  
4 threshold by multiplying a percentage P by the number of  
5 available connections remaining for the port.